

Waves of migrating
birds pulse through
the Don Edwards San
Francisco Bay National
Wildlife Refuge during
the spring and fall
migrations.

From tidal salt marsh to salt ponds, from seasonal vernal pools to upland habitat, the refuge offers wildlife viewing year-round.



Introduction

A major stop on the Pacific Flyway

Great Blue

Heron

San Francisco Bay is the largest estuary on the west coast of the United States. Its 30,000 acres of wetlands, open water, and upland habitats are home to at least 800,000 birds at any given time and to millions during peak migration. Some of these birds are permanent residents and a

few come here only to breed. Most, however, use the Bay as a resting and feeding stop on their long migrations. Seventy percent of the birds that migrate along the Pacific Flyway spend some time each year at San Francisco Bay.

This list, which includes 227 species, includes all avian species found on refuge lands in Alameda, San Mateo, and Santa Clara Counties. The relative abundances in the checklist indicate how frequently you might expect to see a bird in its favored habitat.

The refuge is undergoing a large wetland restoration project, and in just one year the effects of the initial restoration have changed species abundance and diversity significantly. It is expected that over the next decade this list will need revisions. We welcome your input.

Consult field guides or reference books to learn the specific habitats in which a particular species can be found. This checklist is arranged in accordance with the nomenclature used in the *A.O.U. Check-list of North American Birds*, 7th edition (2006).

This list was compiled by the San Francisco Bay Bird Observatory with the assistance of many experienced ornithologistsand veteran birders. Special thanks go to Al Demartini. MichaelMammoser, Peter Metropulos, Bob Richmond, Mike Rogers, and Cheryl Strong.

Bird List Key

Abbreviations and Symbols

Sp - Spring, March through May

S - Summer, June through August

F - Fall, September through November

W - Winter, December through February

Abundance Symbols

a - abundant - a common species which is very numerous

c - common - certain to be seen in suitable habitat

u - uncommon - present, but not certain to be seen

o - occasional - seen only a few times during a season

r - rare - known to be present, but not every year

* - birds known to nest locally

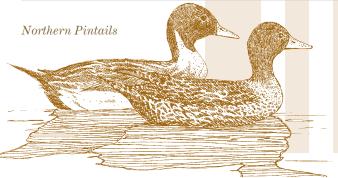
Threatened & Endangered Species

NRefuge - species found in northern range of the refuge SRefuge - species found in southern range of the refuge



California Clapper Rail © Bill Purcell

Common Name		Sp	S	F	W
Waterfowl					
Greater White-fronted Goose		r		0	0
Snow Goose				r	r
Ross's Goose				r	r
*Canada Goose		c	c	c	c
Cackling Goose		0		0	0
Brant		r		r	r
Tundra Swan				r	r
*Gadwall		c	c	c	c
Eurasian Wigeon		r		0	0
American Wigeon		c	r	a	a
*Mallard		c	c	c	c
Blue-winged Teal		0		0	0
*Cinnamon Teal		c	u	c	c
*Northern Shoveler		c	u	a	a
*Northern Pintail		c	u	c	c
Green-winged Teal		u	r	c	c
*Canvasback		c	r	c	a
Redhead	S Refuge	r		u	u
Ring-necked Duck		r		r	r
Tufted Duck		r		r	r
Greater Scaup		c	r	c	a
*Lesser Scaup		c	u	a	a
Surf Scoter		u		c	c
White-winged Scoter		r		r	r
Black Scoter		r		r	r
Long-tailed Duck		r		r	r
Bufflehead		c	r	c	a
Common Goldeneye		u		u	c
Barrow's Goldeneye		r		r	r
Hooded Merganser		r		0	0
Common Merganser		r		r	r
Red-breasted Merganser	S Refuge	u		u	c
*Ruddy Duck		c	u	a	a



Common Name	Sp	S	F	W
Gallinaceous Birds				
California Quail	r	r	r	r
*Ring-necked Pheasant	u	u	u	u
Loons				
Red-throated Loon	0		0	0
Pacific Loon	r		r	r
Common Loon	0		0	0
Grebes				
*Pied-billed Grebe	c	u	c	c
Horned Grebe	u		u	u
Red-necked Grebe	r		r	r
*Eared Grebe	a	0	c	a
Western Grebe	c	0	c	c
Clark's Grebe	c	0	c	c
D. II				
Pelicans				
American White Pelican	u	С	С	c
Brown Pelican	r	u	С	0
Cormorants				
Brandt's Cormorant	r	r	r	r
*Double-crested Cormorant	c	c	a	c
Pelagic Cormorant	r	r	r	r
Bitterns, Herons and Egrets				
American Bittern	r	r	0	0
Least Bittern		r	r	
*Great Blue Heron	c	c	c	c
*Great Egret	c	c	c	c
*Snowy Egret	c	c	c	c
*Little Blue Heron	r	r	r	
*Cattle Egret	r	r	r	r
Green Heron	0	0	0	r
*Black-crowned Night-Heron	c	c	c	c
Ibises and Spoonbills				
*White-faced Ibis	70	10	70	
Willie-laced IDIS	r	r	r	
New World Vultures				
Turkey Vulture	c	c	c	c

Common Name	Sp	S	F	W
Osprey, Kites, Hawks and Eagles				
Osprey	u	r	u	u
*White-tailed Kite	c	c	c	c
Bald Eagle			r	r
*Northern Harrier	c	c	c	c
Sharp-shinned Hawk	0		u	0
Cooper's Hawk	0	r	u	u
Red-shouldered Hawk	0	0	u	0
*Red-tailed Hawk	c	c	c	c
Ferruginous Hawk			r	r
Rough-legged Hawk	r		r	r
Golden Eagle	r	r	0	0
Falcons				
*American Kestrel	u	u	u	u
Merlin	0	и	u	u
*Peregrine Falcon	u	u	u	u
Prairie Falcon	и	и	r	r
Tunic Tulcon				-
Rails				
Black Rail			r	r
*Clapper Rail	u	u	u	u
Virginia Rail	u		c	u
Sora	u		c	u
*Common Moorhen	u	u	u	u
*American Coot	c	c	a	a
Cuana				
Cranes				
Sandhill Crane			r	r
Plovers				
Black-bellied Plover	c	u	a	c
American Golden-Plover			r	
Pacific Golden-Plover	r		r	r
*Snowy Plover	0	0	u	u
Semipalmated Plover	c	u	c	u
*Killdeer	c	c	c	c
Stilts and Avocets				
*Black-necked Stilt	c	c	a	a
*American Avocet	С	c	a	a

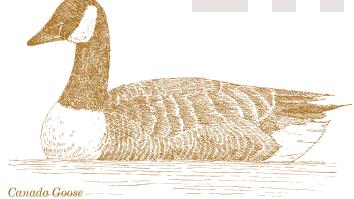
Common Name		Sp	S	F	W
Sandpipers and Phalaropes					
Greater Yellowlegs		c	u	c	c
Lesser Yellowlegs		0	0	u	0
Willet		c	u	a	a
Wandering Tattler		r		r	
Spotted Sandpiper		0		0	r
Whimbrel		0	0	u	u
Long-billed Curlew		c	u	c	c
Marbled Godwit		a	c	a	a
Ruddy Turnstone		0	r	0	0
Black Turnstone		0	r	0	0
Red Knot	NRefuge	u	r	u	0
Sanderling		u	r	u	u
Semipalmated Sandpiper			r	r	
Western Sandpiper		a	c	a	a
Least Sandpiper		c	u	c	c
Baird's Sandpiper		r	r	r	
Pectoral Sandpiper		r	r	0	
Dunlin		a	r	a	a
Stilt Sandpiper				r	
Ruff		r		r	r
Short-billed Dowitcher		c	u	a	c
Long-billed Dowitcher		a	u	a	a
Wilson's Snipe		u		u	u
Wilson's Phalarope		0	a	u	r
Red-necked Phalarope		c	a	a	
Red Phalarope		r		r	r
Skuas, Jaegers, Gulls and Terns					
Parasitic Jaeger				0	
Franklin's Gull		r	r	r	
Bonaparte's Gull		c	0	c	c
Heermann's Gull				r	
Mew Gull		u		u	c
Ring-billed Gull		c	u	a	a
*California Gull		a	a	a	a
Herring Gull		a	r	a	a
Thayer's Gull		u		u	u
*Western Gull		c	u	c	c
Glaucous-winged Gull		u	0	c	c
Glaucous Gull		r			0
Sabine's Gull				r	

Common Name		Sp	S	F	W
Skuas, etc., continued					
*Caspian Tern		c	c	c	
Elegant Tern			r	u	
Common Tern		r		0	
*Forster's Tern		a	a	a	u
Least Tern		u	u	r	
Black Tern		r		r	
*Black Skimmer		u	u	u	u
Auks and Puffins					
Common Murre			0	0	r
Pigeons and Doves					
Rock Dove		u	u	u	u
*Mourning Dove		С	c	С	c
Barn Owls					
*Barn Owl		u	u	u	u
Burn own		и	и	u	и
Typical Owls					
Great Horned Owl		0	0	0	0
*Burrowing Owl		u	u	u	u
*Short-eared Owl		r	r	r	0
Swifts					
Vaux's Swift					
White-throated Swift		0	0	u	0
winte-tiiroated Swiit		0	0	u	0
Hummingbirds					
*Anna's Hummingbird		c	c	c	c
Rufous Hummingbird		r		r	
Allen's Hummingbird				r	
Kingfishers					
Belted Kingfisher		0	0	0	0
Woodpeckers					
Red-breasted Sapsucker				r	
Nuttall's Woodpecker		0	0	0	0
Downy Woodpecker		0		0	0
Northern Flicker		0		0	0
A CHARLES					
	Scaup				
	-/				

Common Name	Sp	S	F	W
Tyrant Flycatchers				
Western Wood-Pewee			0	
Willow Flycatcher			0	
Pacific-slope Flycatcher			u	
*Black Phoebe	u	u	u	u
Say's Phoebe	r		0	0
Ash-throated Flycatcher			r	
Western Kingbird	0	r	r	
Shrikes				
*Loggerhead Shrike	u	u	u	u
Vireos				
Warbling Vireo	0		o	
Crows, Jays and Magpies				
*Western Scrub-Jay	u	u	u	u
American Crow	u	u	u	u
*Common Raven	c	c	c	c
Larks				
*Horned Lark		0	0	0
Horned Lark	0	0	0	0
Swallows				
Purple Martin			r	
*Tree Swallow	u	u	u	0
Violet-green Swallow	u		c	0
Northern Rough-winged Swallow	u	0	u	
Bank Swallow	r	r	r	
*Cliff Swallow	a	a	u	
*Barn Swallow	c	c	c	r
Titmice and Chickadees				
Chestnut-backed Chickadee	0	0	0	0
Bushtits				
*Bushtit	c	c	c	c
Wrong				
Wrens Poelr Wron	7/2	74	7.2	-
Rock Wren *Bewick's Wren	r	r	r	r
	u	u	u	u
House Wren *Marsh Wren	r	C	0	r
Marsh wren	c	С	С	c

Common Name	Sp	S	F	w
Kinglets				
Golden-crowned Kinglet	r		0	r
Ruby-crowned Kinglet	u		u	u
Old World Warblers				
Blue-gray Gnatcatcher	r		r	
Thrushes				
Swainson's Thrush	0		r	
Hermit Thrush	u		u	u
American Robin	0	0	0	u
Varied Thrush			r	r
Mimic Thrushes				
*Northern Mockingbird	c	c	c	c
Sage Thrasher	r		r	
Starlings				
*European Starling	c	c	c	c
Tar opean starting		·		C
Wagtails and Pipits				
American Pipit	c		c	c
Waxwings				
Cedar Waxwing	0		0	u
Octiai waxwiig	U		U	u
Wood Warblers				
Orange-crowned Warbler	0		u	r
Nashville Warbler	r		r	
Yellow Warbler	0		u	r
Yellow-rumped Warbler	c		c	c
Townsend's Warbler	r		r	r
Palm Warbler			r	
Blackpoll Warbler			r	
Northern Waterthrush			r	r
*Common Yellowthroat	c	c	c	c
Wilson's Warbler	u		u	
Tanagers				
Western Tanager	0		0	
MCDUCI II TAHAGEI	0		0	
Sparrows and Towhees				
Spotted Towhee			0	
*California Towhee	c	c	c	c
*Savannah Sparrow	c	c	c	c
-				

Common Name	Sp	S	F	W
Nelson's Sharp-tailed Sparrow	r			r
Fox Sparrow	u		c	u
*Song Sparrow	a	a	a	a
Lincoln's Sparrow	u		u	u
Swamp Sparrow			r	r
White-throated Sparrow	r		r	r
White-crowned Sparrow	c		c	c
Golden-crowned Sparrow	c		c	c
Dark-eyed Junco			0	0
Cardinals, Grosbeaks and Allies				
Black-headed Grosbeak	u		u	
Lazuli Bunting	r	r	r	
Blackbirds and Orioles				
*Red-winged Blackbird	c	c	c	c
Tricolored Blackbird	0	C	u	0
*Western Meadowlark	u	u	c	c
Brewer's Blackbird	u	u	u	u
Brown-headed Cowbird	u	u	u	0
Hooded Oriole	0	0	· ·	Ü
*Bullock's Oriole	0	0	r	
Daniel S Crisic	0	0	1	
Finches				
*House Finch	a	a	a	a
Lesser Goldfinch	u	u	u	u
*American Goldfinch	u	u	u	u
Old World Sparrows				
*House Sparrow	u	u	u	u
La Line				



Accidental Species

Red-tailed Hawk Brown Booby Magnificent Frigatebird Glossy Ibis Wild Turkey Black Oystercatcher Solitary Sandpiper Hudsonian Godwit Bar-tailed Godwit Surfbird Little Stint Sharp-tailed Sandpiper Curlew Sandpiper Buff-breasted Sandpiper Little Gull Black-headed Gull Lesser Black-backed Gull Slaty-backed Gull Arctic Tern Ancient Murrelet Pigeon Guillemot Band-tailed Pigeon Chimney Swift Black-chinned Hummingbird Least Flycatcher Dusky Flycatcher Hammond's Flycatcher Tropical Kingbird Cassin's Kingbird Hutton's Vireo Solitary Vireo White Wagtail American Redstart Magnolia Warbler Yellow-breasted Chat Sage Sparrow Chipping Sparrow Clay-colored Sparrow Brewer's Sparrow Vesper Sparrow Lark Sparrow Chestnut-collared Longspur Pine Siskin



